

FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST 6177
PACIFIC EDGE INDUSTRIES

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST 6177. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the city of Raymond Wastewater Treatment Plant (WWTP). This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

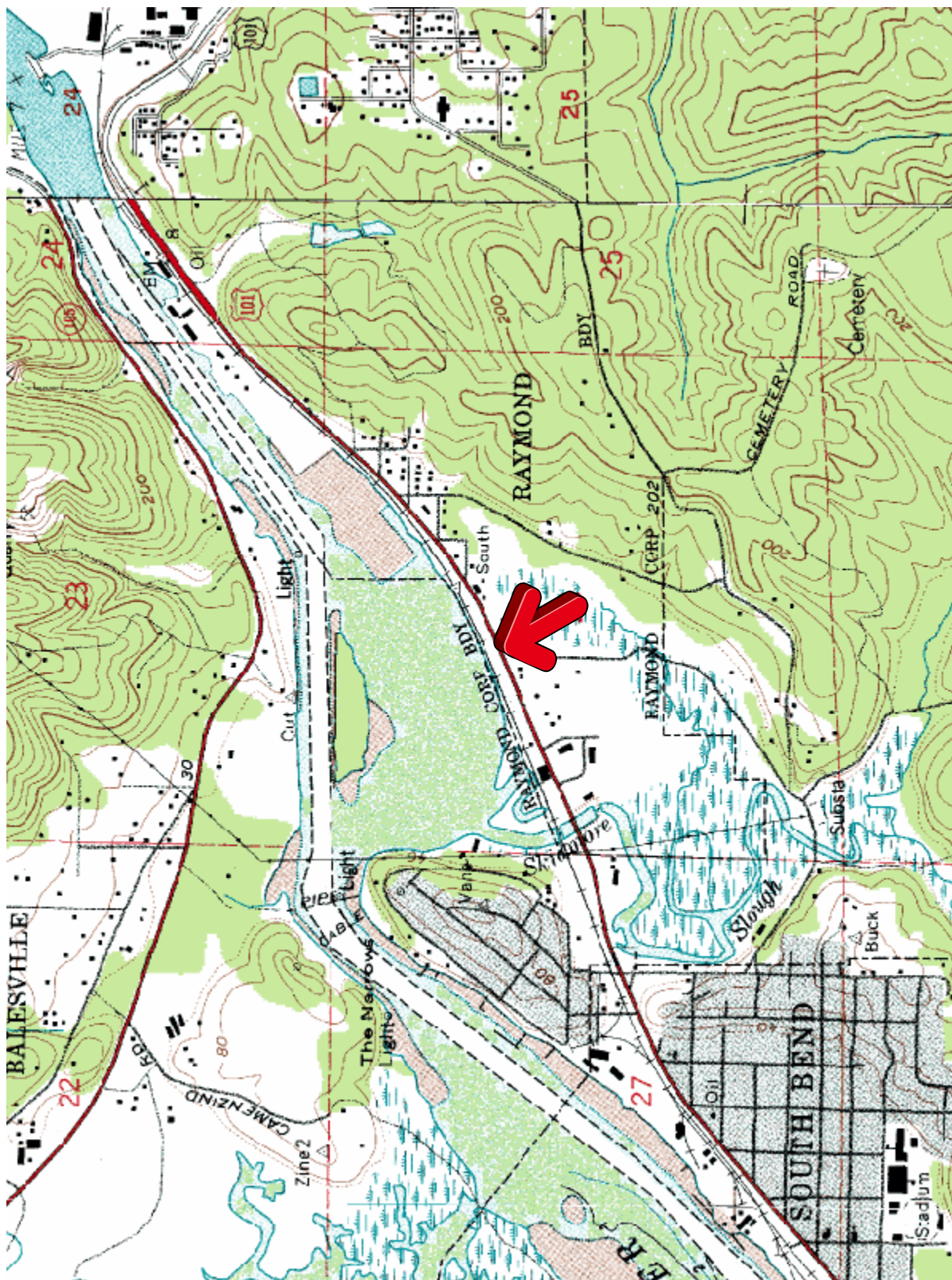
Washington State law (Revised Code of Washington [RCW] 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 Washington Administrative Code [WAC]).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix C—Response to Comments.

<u>GENERAL INFORMATION</u>	
Applicant	Exotic Metals Forming Company (EMFCO)
Facility Name and Address	Pacific Edge Industries (PEI) 2870 Ocean Avenue Raymond, WA 98577
Type of Facility:	Manufacturing of Aerospace Assemblies; SIC Codes: 3724 and 3728
Facility Discharge Location	Latitude: 46° 40' 24.139" N Longitude: 123° 46' 12.216" W
Treatment Plant Receiving Discharge	City of Raymond Wastewater Treatment Plant (WWTP)
Contact at Facility	Name: Darrin Moir, Site manager Telephone #: (360) 875-0172
Responsible Official	Name: Eric Chapman Title: Facilities Engineer Address: 5411 South 226 th Street; Kent, WA 98032 Telephone #: (253) 395-3710 FAX #: (253) 872-8494

Figure 1 PEI location on the map



BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

“Exotic Metals Forming Company (EMFCO) currently operates a manufacturing facility in Kent, Washington, that manufactures a variety of fabricated metal shapes using titanium and other alloys. One manufacturing process is that for its vacuum ducting tube (VDT) production. These tubes are produced in various configurations [approximately 1,100 different configurations can be produced] of titanium tubing and are used in commercial aircraft. EMFCO is expanding its VDT production and intends to set up an additional VDT manufacturing cell at a new facility which will be located in Raymond, Washington. This new facility will be operated under the business name Pacific Edge Industries (PEI).” (Johnson, 2005)

VDT are used for plumbing in lavatories on commercial aircrafts such as Boeing 737, 747, or 787; Gulfstream; and Airbus. PEI sends out approximately 300 parts on Tuesdays and 270 parts on Thursdays.

PEI is not a Significant Industrial User nor is it subject to Categorical Pretreatment Standards.

HISTORY

PEI moved into an existing building on November 15, 2005. The facility started using a rinse tank at the end of January 2006. Currently that’s the only source of industrial wastewater. PEI plans to add two additional manufacturing processes, pressure testing and part marking, in a year or so. The pressure testing will discharge approximately eight gallons of industrial wastewater per month.

INDUSTRIAL PROCESSES

“PEI intends to install and operate a metal fabricating operation in 10,000 square-foot single-story wood framed existing warehouse structure located in Raymond, Washington.” (Johnson, 2005)

The operation consists of the following manufacturing processes:

- Tube Bending

“The titanium tubes are formed into various non-linear configurations using a hydraulic press to bend the tube lengths into various desired shapes. Before bending, the tube is coated with a lubricant to reduce heat and friction during the bending process. The lubricant currently used is DP-1212 provided by Atofina Chemicals Inc. The hydraulic oil system is cooled with non-contact cooling water that passes through the exchanger. [...Water itself is cooled in a close-loop system...] There will be two tube bending stations installed in the new facility, each with its own independent hydraulic system and water chiller. No wastewater will be produced from the tube bending operation. Hydraulic oil is occasionally required to be added during normal maintenance activities. EMFCO estimates that approximate 10 gallons of hydraulic oil will be required each year.”

- Tube Welding

“After bending, fittings and tubing are welded as required to achieve the required final part configuration. Welding is done using a TIG (Tungsten Inert Gas) electrode process with argon as the inert gas. The welding torch is cooled with a recirculating water stream cooled by a water chiller located adjacent to the welder. A coolant mixture of 65 vol. percent water and 35 vol. percent purex is circulated through the closed loop cooling system. Approximately 0.5 gpd [gallons per day] of solution is required as make-up to replace coolant losses due to evaporation

during use. There will be two manufacturing welding stations in the Raymond facility as well as an additional welder set up in a training area.”

- Tube Metalworking

“Metalworking processes are used to shape the tubes into the desired configurations. Grinding, swaging of the tube ends, and various trimming and cutting steps are performed with electric power equipment as requirement to obtain the necessary tube shape. These activities do not generate wastewater.”

- Tube Cleaning

“Tube assemblies which have been formed and welded are cleaned by immersion in an alkaline cleaning solution to remove residues of the DP-1212 lubricant applied in the tube bending process. The cleaning solution is prepared as a mixture of 5 wt. percent granular Turco Vitro-Klene and 95 wt. percent water. The cleaning tank is 96 inches by 30 inches by 38 inches in height with a volume of approximately 450 gallons. The cleaning tank is heated to a constant temperature of 185F using electric heating elements immersed in the cleaning solution. Water is added to the cleaning solution as necessary to replace dragout and evaporative losses. The cleaning solution is normally not removed from the tank but if it is removed, it is managed as a dangerous waste.

After immersion in the cleaning solution, the part is removed and transferred to an adjacent rinse tank. The rinse tank has dimensions similar to the cleaning tank and a sloping drainboard is installed between the cleaning tank and the rinse tank which drains to the rinse tank and prevent dragout solution from spilling on the floor area. The rinse tank is not heated. Approximately 25,000 gallons of rinsewater are estimated to be discharged from the rinsewater tank each month at the Raymond facility and replaced with make-up water to maintain rinsewater quality at the anticipated production volume of 1800 parts per month.

After leaving the rinse tank, the parts are air dried in a drying rack located adjacent to the rinse tank.

The cleaning tank, rinse tank, and drying rack will be located within a containment area with a containment volume equal to 110 percent of the 450 gallon volume of the cleaning tank or approximately 500 gallons. A non-skid grating will be installed within the containment area to provide secure footing for workers. Based on an expected area of 280 square feet, the containment area will have bermed edges a minimum of 3 5 inches in height.”

- Pressure Testing

“Completed tube assemblies are pressure-tested prior to final delivery. In the pressure testing procedure, the tube openings are sealed and the tube interior is filled with water and the tube interior pressurized to the desired test pressure. When pressure testing is complete, the testing water is drained back to a small pressure-testing water tank for reuse. The pressure-testing water tank holds approximately 8 gallons and is drained once per month and refilled with fresh water.

Every tube assembly is pressure tested prior to shipment to customers. Pressure testing will not be performed in the Raymond facility initially. Instead, completed tube assemblies will be transferred to the Kent facility for pressure testing. At a later time, estimated to be approximately one year, pressure testing will be performed at the Raymond facility”

- Part Marking

“Labels are applied to the finished parts. Prior to label application, the surface of the part is prepped with small quantities of acetone and ethanol. It is estimated that approximately 15

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gallons of acetone and 5 gallons of ethanol will be used at the Raymond facility each year. Acetone and ethanol are stored in adjacent 5-gallon vapor-retaining metal containers located on a portable cart in the work area. Initially, no part marking will be performed at the Raymond facility but it is expected that this activity will move to Raymond within a year after production begins.”

This is a new source, permitted by a temporary permit since July 1, 2006.

PEI employees 10 people and operates five days a week, nine hours per day Monday through Thursday and four hours on Friday.

Level of productions depends of new orders from Boeing, Gulfstream, Airbus, and other aircraft makers. Normal turnaround time is 12 days; however the facility can deliver part in several hours in case of an emergency. There are no seasonal variations in production.

The following chemicals are stored and used at the facility:

- Turco Vitro-klene; 5-10 pounds per month
- Acetone; 55 gallons per month
- Atofina DP-1212 Lubricant; 5-10 pounds per month
- Videojet Marking Ink; 5-10 ounces per month
- Ethyl Alcohol; 5 gallons per month
- Hydrochloric acid
- Paint
- Generic household cleaning supply

PROPOSED TREATMENT SYSTEM

“A high pH in wastewater is lowered by adding an acidic substance to the wastewater to reduce the concentration of hydroxyl ions. Various mineral acids such as sulfuric acid or hydrochloric acid are commonly added to wastewater for this purpose. The neutralization requirements for the mildly-alkaline rinsewater produced during tube cleaning are relatively modest. Therefore, the addition of a small quantity of acid to the wastewater stream will accomplish the necessary neutralization.

Hydrochloric acid is preferred as a wastewater neutralization agent as its use will avoid introducing sulfate into the wastewater which could contribute to odor problems, it is a powerful neutralizing agent which will minimize the quantity needed, it is commonly used for this purpose, and it is relatively easy to handle.

The hydrochloric acid will be pumped with a metering pump from a drum into a small 100-gallon in-line neutralization tank where it will be mixed with the entering flow of wastewater under automatic pH control. A pH sensor will be installed in the neutralization tank which will provide continuously monitored by a pH controller. When the pH exceeds the desired maximum setpoint, the hydrochloric acid will be added under automatic proportional control so that the rate of addition will increase as the deviation from the pH target increases. As the pH decreases, the rate of addition will slow and will stop completely when the pH decreases to below the minimum setpoint. A system such as this will maintain the pH within a narrow range sufficient to meet the anticipated effluent pH requirements. [...]

The pH controller will provide continuous pH monitoring and will sound an alarm for either a high or low pH condition. If an alarm condition occurs, a solenoid valve will shut off the flow of water to the rinse tank, thereby stopping the discharge flow of water until the alarm condition can be corrected.” (Johnson, 2005)

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600 to 800 gallons per day (gpd) are currently discharged from the tube cleaning manufacturing process. PEI requested a flow limit of 1,200 gpd.

Darrin Moir, Site Manager, is responsible for the treatment system and monitoring.

In addition to pH adjustment there are two filtration processes. The first filtration process removes chlorine before water is used in the cleaning operation. The second filtration process removes solids from rinse water.

The engineering report was approved on March 21, 2006.

PERMIT STATUS

This is a new facility. An application for a permit was submitted to the Department on September 21, 2005, reviewed and deemed incomplete. On October 19, 2005, a letter was sent requesting two copies of an engineering report and complete application packet. The application was resubmitted on May 2, 2006, and accepted on May 2, 2006. A Public Notice of Application was published June 28, 2006, and July 5, 2006, in *Willapa Harbor Herald*. A temporary permit was issued on July 1, 2006.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on July 13, 2006. During the inspection an engineering report was available for review; however the permit application was not.

PEI is required to keep all records associated with industrial wastewater discharge, including the permit application, at the Raymond facility.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and engineering report. The proposed wastewater discharge is characterized for the following parameters in the application:

Parameter	Concentration
pH	8.75 SU [standard units]
Arsenic (total)	Less than method detection limit (<MDL)
Cadmium (total)	<MDL
Chromium (total)	0.015 mg/L; >MDL but less than reporting detection limit (<RDL)
Copper (total)	0.221 mg/L
Lead (total)	<MDL
Nickel (total)	0.041 mg/L; >MDL but <RDL
Silver (total)	<MDL
Zinc (total)	0.0087 mg/L; >MDL but <RDL
Total Toxic Organics VOA (long list of tested organics is provided with the application)	<MDL

SEPA COMPLIANCE

[...] “PEI is categorically exempt from SEPA threshold determination and EIS requirement.” (Johnson, 2005)

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the engineering report (Johnson, 2005).

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). Existing federal categorical limitations for this facility are found under 40 Code of Federal Regulations (CFR) Part 403, General Pretreatment Regulations for Existing and New Sources of Pollution:

Parameter	Minimum	Maximum
pH	5.0	N/A
Temperature at the POTW	N/A	104 degrees Fahrenheit

AKART for this wastewater should include pH neutralization. Therefore, Ecology will address effluent pH from two standpoints: neutralization and monitoring. No temperature limit or monitoring is necessary for this discharge due to dilution. See discussions that follow. (Department, 2006)

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the City of Raymond POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by the City of Raymond and codified in ordinance. Applicable limits for this discharge are as follows:

City of Raymond Local Limits:

Parameter	Effluent Limitations
Temperature	150 degrees Fahrenheit
Oil and Grease (O&G)	100 milligrams per liter (mg/L)
pH	5.5--8.5 standard units
5-day Biochemical Oxygen Demand (BOD ₅)	300 mg/L

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Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause interference, pass-through or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge.

No temperature limit or monitoring is required because wastewater discharge has a room temperature. PEI has an oily operation with a potential for O&G discharges; therefore the O&G limit and monitoring requirement will be placed in the permit.

The Department proposes to increase the upper limit for pH from 8.5 to 10.5. This should reduce the potential for pH violations and lower the use of hydrochloric acid for neutralization. Also, the allowance to discharge higher pH wastewater could benefit the Raymond POTW. A pH range between 5.5 and 10.5 should be protective of Raymond's sewer collection system.

Typically, the Department does not impose BOD₅ and TSS concentration limits to high strength wastes if (1) the POTW can easily treat and assimilate the hydraulic and organic loading and (2) the POTW is adequately compensated for their treatment costs, so that the public does not subsidize the industry. The city of Raymond has a formula for assessing extra fees to high strength waste streams, to cover the city's cost to treat high strength wastewater. Therefore, Ecology will not impose the 300 mg/L BOD₅ limit and the 300 mg/L TSS limit. (Department, 2006)

The city of Raymond's sewer ordinances have been in place since 1992. Ecology encourages the City to review these ordinances, including cost recovery, and update them, if deemed appropriate. (Department, 2006)

Due to federal NPDES program requirements, the city of Raymond POTW has begun evaluating upgrade options. If local loading limits are passed into ordinance or another official manner, the Department would likely add them as permit requirements. (Department, 2006)

PROPOSED PERMIT LIMITS

Parameter	Effluent Limitations
Flow	1,200 gallons per day (gpd)
Oil and Grease (O&G)	100 milligrams per liter (mg/L)
pH	5.5--10.5 standard units

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring for total toxic organics (TTO), cadmium, nickel, chromium, copper, lead, silver, zinc, cyanide, total suspended solids (TSS), and 5-day biochemical oxygen demand (BOD₅) is being required to further characterize the effluent. TTO, cadmium, nickel, chromium, copper, lead, silver, zinc, and cyanide could have a significant impact on the receiving POTW. POTW limits TSS and BOD₅ and the permit application did not characterize these pollutants.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3. are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires submission of an O&M manual for the entire wastewater system.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Condition G7 is related to permit transfer. Condition G8 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G9 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G10 requires the payment of permit fees. Condition G11 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for five years.

REFERENCES FOR TEXT AND APPENDICES

David T. Johnson, P.E. (Johnson)

2005. Pretreatment Engineering Report. November 28, 2005.

Washington State Department of Ecology (Department).

2006. Fact Sheet for State Waste Discharge Permit St-6167; Weyerhaeuser Raymond Lumber Mill

Laws and Regulations(<http://www.ecy.wa.gov/laws-rules/index.html>)

Permit and Wastewater Related Information

(<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>)

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on June 21, 2006, and June 28, 2006, in the Chinook Observer and Willapa Harbor Herald to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on (date) in (name of publication) to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Unit Permit Coordinator
Department of Ecology
Southwest Region - Water Quality
P.O. Box 47775
Olympia, WA 98504-7775

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the 30 day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least 30 days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within 30 days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (360) 407-6280, or by writing to the address listed above.

This permit was written by Jacek Anuszewski, P.E.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring—Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over a short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7.0 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 percent of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C—RESPONSE TO COMMENTS